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Developments in MARKETING SPREADS FOR AGRICULTURAL PRODUCTS in 1970

Statement Prepared for Hearings Before the Agriculture Subcommittee of the Committee on Appropriations, U.S. House of Representatives, Ninety-Second Congress, First Session.

U.S. DEPARTMENT OF AGRICULTURE ECONOMIC RESEARCH SERVICE

ABSTRACT

Charges for marketing food products that originated on U.S. farms rose substantially more in 1970 than in any year during the 1960's. The spread between the retail cost and farm value of a market basket of farm foods rose 7 percent last year, compared with 1.9 percent for 1969 and 2.6 percent for 1968. Although marketing spreads for practically all products widened in 1970, major attention centered on pork and beef, which rose 20 percent and 9 percent, respectively. The marketing bill--total charges for transporting, processing, and distributing farm foods--totaled almost $69 billion in 1970, 8 percent greater than in 1969. This increase was almost double the average increase during the past decade, due chiefly to higher labor costs. Marketing charges accounted for two-thirds of the $102 billion spent by consumers for farm foods last year. The remaining third represented the payment or gross return that farmers received for farm food products.

Key Words: Marketing spreads, Food costs, Marketing costs, Farm value, Farmer's share, Market basket.

PREFACE

Congress in 1955 directed the U.S. Department of Agriculture to make special studies of spreads between prices paid by consumers and those received by farmers. The reports published in 1970 are summarized in this publication prepared for the Agriculture Subcommittee of the Committee on Appropriations, U.S. House of Representatives. Thirteen similar reports have been published summarizing the results of earlier studies.

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HIGHLIGHTS

1. Charges for marketing farm-originated food products rose considerably more in 1970 than in any year during the 1960's. The spread between the retail cost and the farm value of a market basket of farm foods rose 7 percent last year, compared with 1.9 percent in 1969 and 2.6 percent in 1968.

2. Although marketing charges of practically all products widened in 1970, major attention was centered on prices and margins for pork and beef. The farm-retail spread or marketing margin for pork averaged 20 percent higher last year than in 1969, and the spread for beef rose almost 9 percent.

3. Farm prices of food products averaged less than 1 percent higher in 1970 than in 1969. Farm prices of some commodities, particularly hogs, dropped sharply during the year. Between the first and fourth quarters of 1970, live hog prices declined 40 percent. This decrease was only partially reflected in retail prices of pork because of widening marketing margins.

4. Declining farm prices slowed the rise in grocery store food prices in the latter half of 1970. In the fourth quarter, food prices were only about 1 percent above a year earlier. However, as a result of a sharp rise in prices early in the year and widening marketing spreads, retail food prices were substantially higher in 1970 than in 1969. The retail cost of a market basket of farm foods averaged 4.4 percent higher.

5. The farmer's share of the consumer's retail food dollar averaged 39 cents in 1970, 2 cents less than in 1969. During the 1960's, the farmer's share ranged between 37 and 41 cents.

6. The marketing bill--total charges for transporting, processing, and distributing farm foods--totaled almost $69 billion in 1970, 8 percent greater than in 1969. This increase was almost double the average increase of 4½ percent per year during the past decade. Higher labor costs accounted for most of the increase in food marketing charges last year. Rising wage rates, combined with a slowdown in productivity advances, substantially increased labor costs per unit of output.

7. Marketing charges accounted for two-thirds of the $102 billion spent by consumers for farm foods last year. The remaining third, or $33 billion, represented the payment or gross return that farmers received for farm food products.

8. Profit rates of food processors and retailers were about the same in 1970 as in other recent years. However, total profits rose moderately as a result of greater dollar sales.

9. Despite rising prices, consumers on the average spent only 16.7 percent of their after-tax income for food in 1970. This was the same percentage as in 1969, but below the 20-percent share in 1960. As the rise in food prices moderates and incomes continue to increase, the proportion of disposable income spent for food will likely resume the downward trend of the past decade.

DEVELOPMENTS IN MARKETING SPREADS FOR AGRICULTURAL PRODUCTS IN 1970

FOOD PRICES AND MARKETING SPREADS

Price spreads, or what are commonly referred to as marketing margins, attracted wide attention in 1970. The Economic Research Service received many requests for information on margins and food costs from the public, news media, Congress, and the Council of Economic Advisors. With farm prices of hogs exhibiting one of the sharpest declines ever and the marketing spread for pork up substantially, pork and beef margins were of particular concern. In responding to these inquiries, ERS relied extensively on its continuing pricing study of the market basket of farm foods and related research on marketing costs and charges. 1/ Information obtained from this research, published quarterly in the Marketing and Transportation Situation, is summarized in the following pages.

Marketing Spreads Widen

After the first quarter of 1970, gross marketing spreads widened substantially, while prices of food products at the farm level declined. Typically, marketing spreads widen when farm prices decline, but the increases in 1970 were considerably greater than in previous periods of price declines. In 1970, the marketing spread or margin--the difference between the retail cost and farm value of the market basket--averaged 7 percent higher than in 1969. This compares with an increase of 1.9 percent in 1969 and 2.6 percent in 1968. Last year, the marketing margin accounted for a substantial part of the increase in the retail cost of the market basket over the previous year.

Marketing spreads for practically all food products increased last year, but the spread for pork widened considerably more than the spread for most other products (table 1). As shown in table 2, the widening of the pork spread coincided with a sharp decline in the farm value of pork (payment to farmers for live-animal equivalent of 1 pound sold at retail). Between the first and fourth quarters, the farm value of pork declined 19.7 cents. At retail, the average pork price declined only 10.6 cents per pound. Consequently, the farm-retail spread widened 9.1 cents, or 27 percent. The large increase in the pork spread paralleled that of beef in mid-1969. In 1970, beef margins were relatively stable the first 9 months of the year but widened significantly in the fourth quarter. Prior to the recent increases, spreads for beef and pork had changed little for several years.

1/ The market basket includes the average quantities of farm-originated foods purchased annually per household in 1960-61 for consumption at home.

Table 1.--U.S. average retail price, farm value, and marketing spread of selected farm foods, 1970 1/

Product	Retail unit	Retail price	Farm value	Marketing spread	Change: 1970 from 1969		
					Retail price	Farm value	Marketing spread
		Cents	Cents	Cents	Percent	Percent	Percent
Beef, choice	Lb.	98.7	61.6	37.1	2.5	-1.0	8.8
Pork	Lb.	78.0	39.5	38.5	5.0	-6.6	20.3
Butter	Lb.	86.6	62.8	23.8	2.4	1.1	5.8
Cheese	½ lb.	50.4	22.3	28.1	7.2	6.2	8.1
Ice cream	½ gal.	84.5	28.5	56.0	4.1	3.6	4.3
Milk	½ gal.	57.4	28.7	28.7	4.2	4.0	4.4
Chickens	Lb.	40.8	18.6	22.2	-3.3	-10.6	3.7
Eggs	Doz.	61.4	38.3	23.1	-1.1	-7.3	11.1
Bread	Lb.	24.2	3.4	20.8	5.2	3.0	5.6
Corn flakes	12 oz.	32.2	2.8	29.4	2.9	7.7	2.4
Apples	Lb.	21.9	6.2	15.7	-8.4	-22.5	-1.3
Oranges	Doz.	86.4	20.3	66.1	3.3	7.4	2.2
Lettuce	Head	29.9	9.4	20.5	-3.9	-18.3	4.6
Potatoes	10 lb.	89.7	25.7	64.0	10.2	9.8	10.3
Tomatoes	Lb.	42.0	15.0	27.0	-.2	-3.8	1.9
Peaches	2½ can	35.2	6.0	29.2	2.3	0	2.8
Corn	303 can	24.4	3.0	21.4	2.5	0	2.9
Peas	303 can	25.2	3.7	21.5	1.2	0	1.4
Orange juice, concen. frozen	6-oz. can	22.5	7.8	14.7	-6.6	-28.4	11.4
French fried potatoes, frozen	9-oz.	16.6	2.8	13.8	2.5	-9.7	5.3

1/ Farm value is the payment to the farmer for the quantity of farm product equivalent to the unit sold at retail adjusted for the value of byproducts. For example, the farm value of beef represents 2.28 lbs. of live animal. Marketing spread is the difference between retail price and farm value. It is an estimate of the total gross margin received by marketing firms for assembling, processing, transporting, and distributing these foods. All prices in this table, except for pork and Choice beef, are included among those used in calculating the market basket statistics. For beef and pork, average prices representing all grades are used.

Marketing spreads for farm foods increased nearly every year in the past decade and in 1970 averaged 25 percent higher than in 1957-59 (fig. 1). Higher costs of marketing operations are the major factor in widening marketing spreads. As illustrated in figure 2, changes in the spread are closely related to changes in marketing costs. Marketing spreads will probably continue their upward trend in 1971, in response to rising costs of food processing and distribution, particularly labor.

Farm Value Declines From Peak Level

After reaching a record level in the first quarter of 1970, average farm prices of food products dropped off markedly during the remainder of the year. Farm prices of food products moved lower primarily in response to expanding supplies of livestock products. Hog production rose sharply in the fall of the year, and prices declined to the lowest level in several years. Led by larger supplies of pork, red meat output in 1970 exceeded the 1969 level by 2 percent. Meanwhile, supplies of food grains declined in 1970 and prices rose. Farm values of bakery and cereal products and fats and oils in the market basket were up nearly 6 and 21 percent, respectively, over 1969.

Despite declining prices during much of the year, the total farm value of food products averaged about the same in 1970 as in 1969, but 24 percent higher than in the 1957-59 base period. The farmer's share of the consumer's retail food dollar, on the other hand, averaged 39 cents last year, compared with 41 cents in 1969. Since 1957-59, the farmer's share has ranged between 37 and 41 cents (fig. 3).

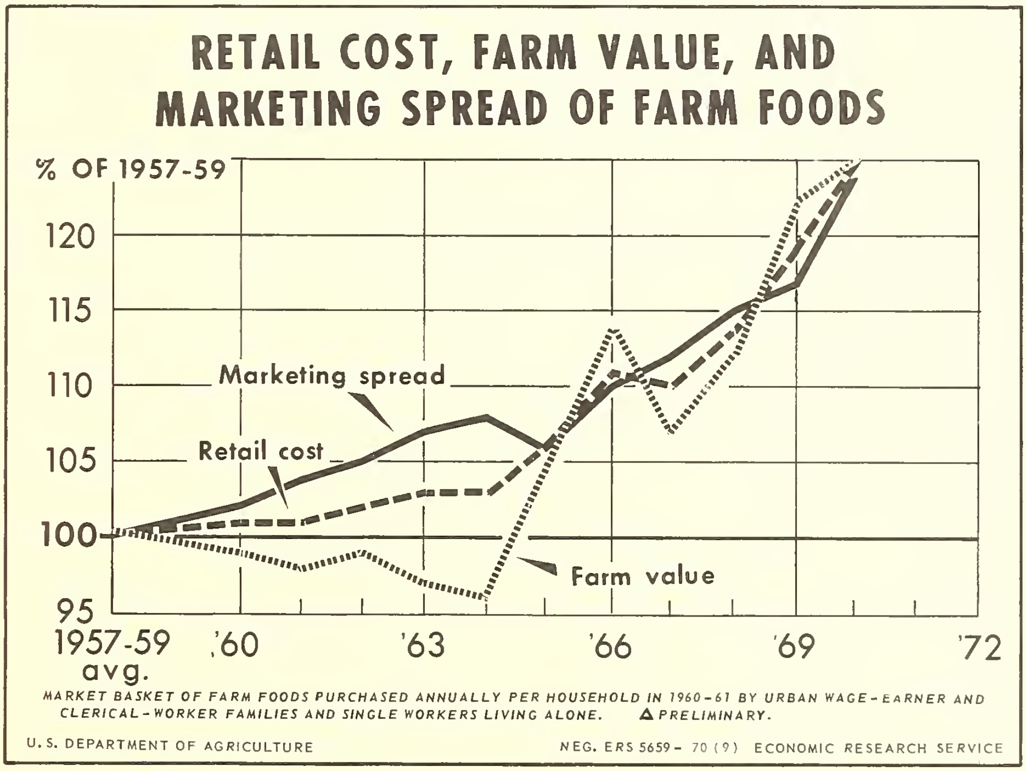

Figure 1

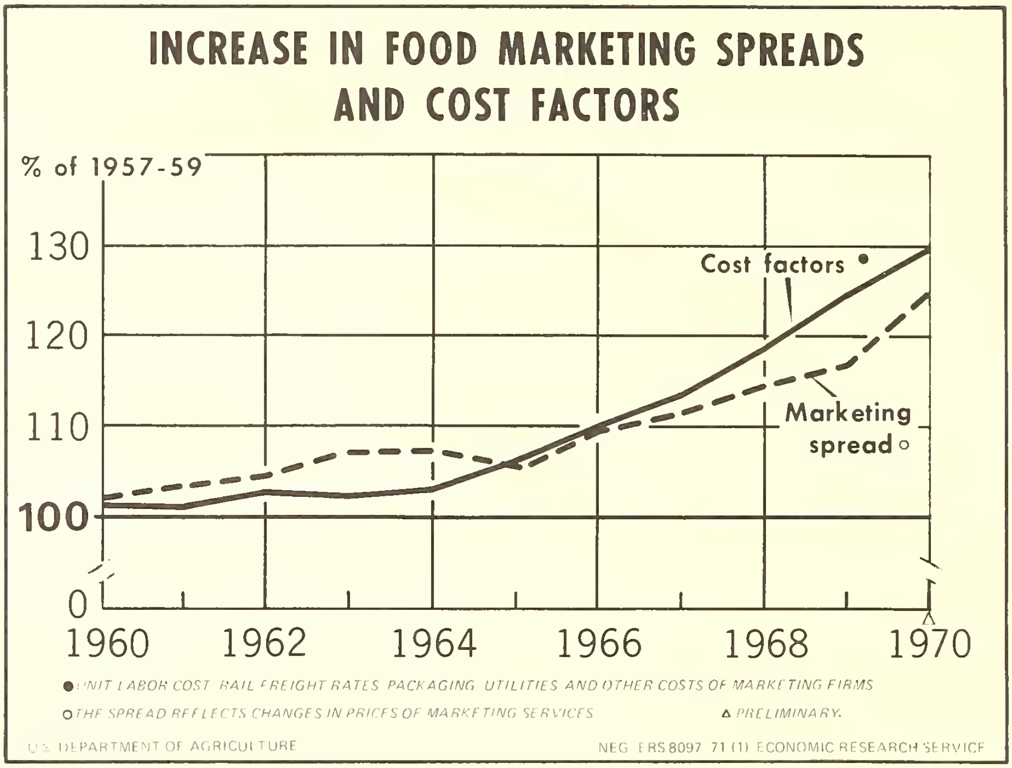

Figure 2

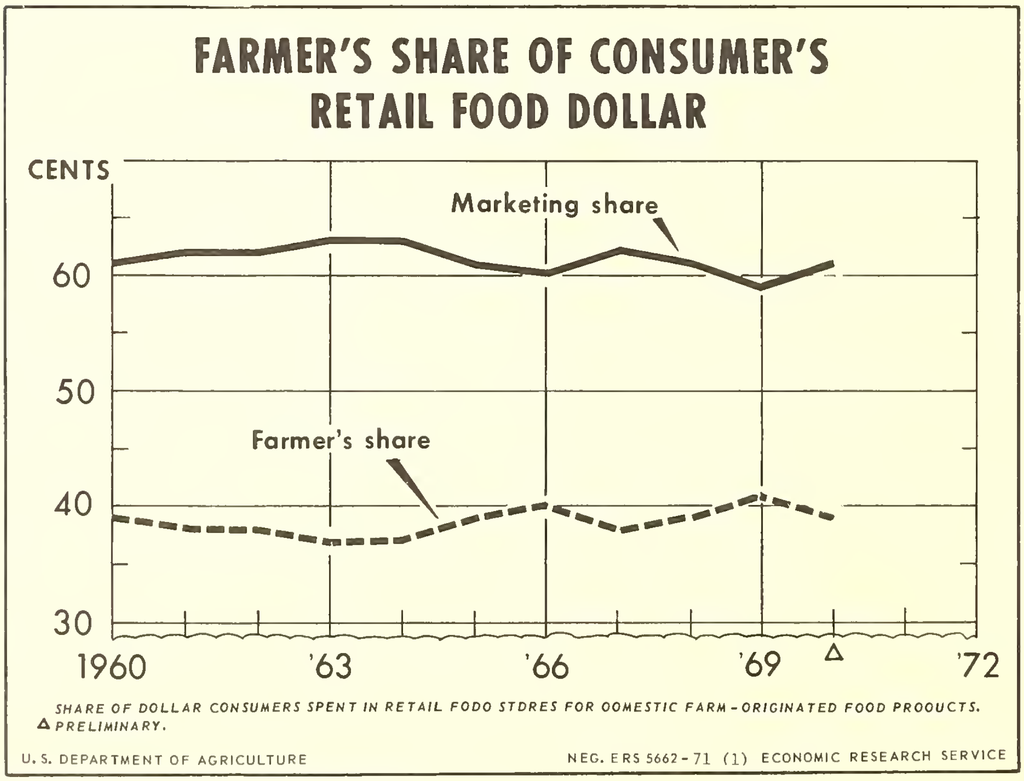

Figure 3

Because marketing margins have been trending upward over the past decade, average retail food prices during this period have stabilized or declined only when farm prices of food products declined. Falling prices at the farm level were the major factor preventing any significant rise in retail food prices during 1960-64. However, rising farm prices and widening spreads since 1965 have contributed to the substantial increase in food prices.

Rise in Retail Prices Slows

Lower farm prices slowed the rise in retail food prices in the latter half of 1970. However, the decline in retail prices was considerably smaller than the drop in farm prices because of widening marketing spreads. Food prices in grocery stores declined slightly in August through November, due mainly to a seasonal increase in supplies of several important commodities, particularly pork. Average retail food prices in the fourth quarter were only 1 percent higher than in 1969. The amount of increase in retail prices over levels a year earlier narrowed throughout 1970, reflecting the slowing of the rise in prices during the year.

As a result of the sharp gains in prices early in the year, grocery store food prices in 1970 averaged substantially higher than in 1969. The retail cost of the market basket of farm products was $1,225 last year, an increase of $51, or 4.4 percent, from 1969. This rise was slightly less than the increase in food costs for 1969. Higher prices to farmers from the sale of food products accounted for $2 of the increase, and higher marketing spreads for $49. Much of the increase in the market basket cost in 1970 reflected higher average prices for meat products, bakery and cereal products, and fresh vegetables.

Because of probable further widening of marketing margins, retail food prices in the first half of 1971 likely will average slightly higher than during the closing months of 1970. Transportation, processing, and other marketing costs, which account for about 60 percent of the food dollar, are continuing to rise at a rapid pace.

Food prices have increased rapidly since 1965, but not as rapidly as prices of most other goods and services. In December 1970, prices of food purchased for consumption at home averaged 17 percent higher than 5 years earlier. This compared with a 25-percent rise for all items in the Consumer Price Index (CPI), commonly termed the "cost-of-living" index. In contrast, prices of food away from home increased 33 percent, considerably more than grocery store prices or the overall CPI.

PRICES AND MARGINS FOR SELECTED FOODS

As in other years, studies were made of prices and margins for specific foods as they moved through the marketing system. From these data, it is possible to estimate how the total margin is divided among various marketing agencies. This information supplements the market basket data by providing more detailed insight into the performance of food firms at various marketing levels.

Pork

Retail prices of pork averaged 78 cents a pound in 1970, 3.7 cents above 1969. However, prices declined through the year from a high of 82 cents a pound in January to a low of 68.5 cents in December. Retail prices were relatively stable from April to August, holding about 80 cents per pound.

In 1970, the net farm value averaged 39.5 cents per pound, nearly 3 cents below 1969. However, the change during the year was much more dramatic--a decline from a high of 50 cents per pound in February to a low of 27 cents per pound in December. Pork prices generally drop in the fall, but the rate of decline in 1970 was more precipitous than usual.

The 1970 farm-retail spread for pork averaged 20 percent higher than in 1969. The sharp rise in the spread from 33.7 cents per pound in the first quarter to 42.8 cents in the fourth quarter occurred as the farm value of pork declined at a much faster rate than retail prices.

Quarterly retail prices, price spreads, and average market quotations for live hogs from 1968 to 1970 are shown in table 2. During 1970, the farm-wholesale portion of the spread increased from 16.6 cents per pound in the first quarter to an alltime high of 23.1 cents per pound in the fourth quarter. The wholesale-retail portion of the spread ranged from 17.1 cents to a record high of 21 cents in the third quarter. Market hog prices fell from $27.32 to $16.41, a decline of $10.91 per hundredweight during the year. In summary, margins of all marketing agencies increased markedly in 1970, while live hog prices declined sharply.

Factors contributing to the increase in the farm-retail price spread for pork last year included: (1) rising marketing costs, (2) increased supply, and (3) nature of the retail pricing policy.

Labor costs, which represent about half of retail meat margins, have risen substantially in recent years. Prices of other inputs used by food retailers also have increased.

Retailers' markups lag behind some cost changes in the short run, particularly when wholesale prices are changing rapidly. Margins tend to increase when wholesale prices are declining, and to decrease when they are on the rise. This relationship has occurred consistently over the past 20 years. Declines of 3 months or more in the wholesale price of pork have nearly always been accompanied by increases in the farm-retail price spread. On the average, a 1-cent decline in the wholesale value of pork has been accompanied by a 0.4-cent increase in the farm-retail spread.

Recent increases in the marketing spread for pork, although larger than average, are consistent with past trends. Between the first and fourth quarters of 1970, the wholesale value of pork declined 13.2 cents, while the farm-retail spread increased 9.1 cents per retail pound. Thus, in 1970, the farm-retail spread increased almost 0.7 cent for every 1-cent decline in the wholesale value.

Table 2.--Pork: Retail price, farm value, and price spreads, quarterly 1968-70

Item	1968				1969				1970			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
	Cents per pound											
Retail price 1/	66.4	66.9	69.1	67.3	68.5	71.9	78.0	78.9	81.8	80.0	79.0	71.2
Wholesale value 2/	50.4	51.8	53.5	50.9	52.8	56.5	62.1	62.7	64.7	60.6	58.0	51.5
Gross farm value 3/	35.9	36.9	39.0	34.7	38.4	43.5	50.3	49.8	52.3	45.4	43.0	30.8
Byproduct credit 4/	2.2	2.2	2.2	2.1	2.6	2.9	3.5	3.8	4.1	3.5	3.3	2.4
Net farm value 5/	33.7	34.8	36.8	32.6	35.8	40.6	46.8	46.0	48.1	41.9	39.7	28.4
Farm-retail spread 6/	32.7	32.1	32.3	34.7	32.7	31.3	31.2	32.8	33.7	38.1	39.3	42.8
Wholesale-retail spread 7/	16.0	15.1	15.6	16.4	15.7	15.4	15.9	16.1	17.1	19.4	21.0	19.7
Farm-wholesale spread 8/	16.7	17.0	16.7	18.3	17.0	15.9	15.3	16.7	16.6	18.7	18.3	23.1
	Dollars per cwt.											
Live hog price 9/	18.93	19.44	20.50	18.32	20.29	22.89	26.31	26.08	27.32	23.84	22.58	16.41

1/ Weighted average price of retail cuts from pork carcass.
2/ Weighted average price of wholesale pork cuts equivalent to 1 pound of r[illegible]il cuts (1.07 pounds).
3/ Payment to farmer for quantity of live hog equivalent to 1 pound of reta[illegible]cuts (1.97 pounds), less marketing costs.
4/ Value of inedibles, lard, etc., not sold as pork.
5/ Gross farm value minus byproduct credit.
6/ Difference between retail price and net farm value.
7/ Difference between retail price and wholesale value.
8/ Difference between wholesale value and net farm value.
9/ Weighted average price of barrows and gilts (180-220 pounds) at 7 principal markets.

The slight change in the pork spread in the late 1960's, despite steadily rising costs, may have contributed to the larger than usual increase in the spread in 1970. Another factor was the general upward trend in wholesale pork prices from December 1968 to January 1970. During this period, retail prices rose by almost the same amount as wholesale prices. However, when wholesale prices declined after February 1970, retail price decreases lagged more than usual, thereby increasing the farm-retail spread.

Beef

Consumers paid an average of 98.7 cents per pound for Choice beef in 1970--2½ percent more than in 1969. The net farm value of this beef averaged 1 percent lower than in 1[illegible] thus, the 1970 farm-to-retail price spread widened 3 cents from 1969, and 7.2 cents from 1968. Retail prices were highest during the summer months, reaching $1.01 per pound in July. The net farm value also peaked in July at 65.4 cents per pound, then declined to 56.3 cents per pound in December. This price decline reflected larger fed cattle marketings at heavier weights and also abundant supplies of pork.

The farm-to-carcass component of the price spread ranged between 6 and 7 cents per pound during 1970, as it has for the past several years. The farm-to-carcass spread measures gross returns between farm and packer, including transportation, selling, and slaughtering costs.

The carcass-to-retail portion of the price spread, which increased rather sharply in mid-1969, ranged from 29.5 cents in the first quarter to 32.5 cents in the fourth quarter of 1970. The carcass-to-retail spread measures the gross return for transporting the carcass to the retailer, breaking, fabrication of cuts or other further processing into primal and subprimal cuts, local distribution to retail stores, and retail store cutting, packaging, and selling.

The average retail price, carcass value, and farm value of Choice beef during 1968-70 are presented by quarter in table 3. These data as well as the resulting price spreads are calculated on a retail weight basis to allow direct comparison between market levels. The byproduct value is deducted from the gross farm value since these products do not enter the retail market directly. Also shown is the average price quotation for Choice steers on a liveweight basis at seven primary markets.

Price data over the past 3 years indicate (1) a marked increase after mid-1969 in gross margins for firms sharing the carcass-retail spread, (2) little change in the gross margins of slaughterers and firms such as livestock truckers, dealers, order buyers, and commission agents, and (3) a live cattle market whose prices have not kept pace with retail prices.

Eggs, Frying Chickens, and Turkeys

Farm prices of eggs, fryers, and turkeys declined during 1970, while marketing spreads widened. Retail prices of frying chickens and eggs averaged slightly lower in 1970 than in 1969, but turkey prices averaged somewhat higher.

Table 3.--Choice beef: Retail price, farm value, and price spreads, quarterly 1968-70

Item	1968				1969				1970			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
	Cents per pound											
Retail price 1/	85.0	85.7	87.5	88.1	90.1	97.8	101.0	96.3	98.1	99.3	100.1	97.4
Carcass value 2/	62.0	62.3	64.1	64.1	66.1	74.6	69.7	64.3	68.6	69.3	70.3	64.9
Gross farm value 3/	59.2	59.6	61.5	61.8	63.7	73.3	67.9	62.9	66.6	68.2	68.0	62.4
Byproduct credit 4/	3.6	3.7	3.8	4.0	4.0	4.8	5.1	4.9	5.0	4.9	4.6	4.5
Net farm value 5/	55.6	55.9	57.7	57.8	59.7	68.5	62.8	58.0	61.6	63.3	63.4	57.9
Farm-retail spread 6/	29.4	29.8	29.8	30.3	30.4	29.3	38.2	38.3	36.5	36.0	36.7	39.5
Carcass-retail spread 7/	23.0	23.4	23.4	24.0	24.0	23.2	31.3	32.0	29.5	30.0	29.8	32.5
Farm-carcass spread 8/	6.4	6.4	6.4	6.3	6.4	6.1	6.9	6.3	7.0	6.0	6.9	7.0
	Dollars per cwt.											
Liveweight steer price 9/	26.55	26.74	27.56	27.68	28.54	32.73	30.37	28.16	29.71	30.14	30.42	27.96

1/ Weighted average price of retail cuts from Choice grade carcass.
2/ Carcass value of quantity of Choice grade beef equivalent to 1 pound of retail cuts (1.41 pounds).
3/ Payment to farmer for quantity of Choice grade beef cattle equivalent to 1 pound of retail cuts, (2.28 pounds), less marketing costs.
4/ Value of inedibles, hides, etc., which are not sold as beef.
5/ Gross farm value minus byproduct credit.
6/ Difference between retail price and net farm value.
7/ Difference between retail price and carcass value.
8/ Difference between carcass value and net farm value.
9/ Average price of Choice grade steers at 7 principal markets and quotations to California feeders and ranchers.

Eggs: The estimated average retail price of Grade A large eggs sold in 12 major cities during 1970 was 60.8 cents per dozen, only 0.5 cent per dozen less than in 1969. Retail prices were higher than usual during the first 3 months of the year, but declined sharply in the spring and summer.

Farm prices, like retail prices, were strong during the first part of 1970, then declined during the spring and summer. Farm prices showed some strength in the late summer and fall but were not as strong as in 1969. The farm value of Grade A large eggs sold in these 12 major cities averaged more than 40 cents per dozen for 8 months in 1969, compared with only 3 months in 1970. Yet, because of high prices in the spring of 1970, the 12-month average value of Grade A large eggs at the farm level was 38.3 cents, only 1.5 cents less per dozen than in 1969.

While the average farm price of eggs declined about 4 percent in 1970, the farm-to-consumer margin increased from 21.5 cents per dozen in 1969 to 22.5 cents in 1970, an increase of 1.0 cent per dozen, or 4.7 percent. The farm-to-retailer component of the total margin increased an average of 0.4 cent per dozen, while the retail margin increased 0.6 cent per dozen.

The decrease in farm price and the increase in marketing margins led to a decrease in the farmer's share of the consumer's dollar spent for eggs. Although this figure declined from 65 percent in 1969 to 63 percent in 1970, it was still higher than any year in the past five with the exception of 1969--an extremely good year for egg producers.

Frying Chickens: Both retail and farm prices of frying chickens averaged lower in 1970 than in 1969. The estimated average retail price of frying chickens in 12 major cities was 42.0 cents per pound, compared with 43.6 cents in 1969--a drop of 1.6 cents per pound during a period of increasing food prices, especially for meats.

The farm equivalent value of frying chickens dropped to an average of 17.7 cents per pound, 3.1 cents lower than in 1969, and the lowest in several years.

The farm-to-consumer spread in 1970 averaged 24.3 cents per pound, an increase of 1.5 cents per pound or 6.5 percent over 1969. The farm-to-retailer margin increased by 1.2 cents per pound, and the retail margin by 0.3 cent per pound.

Because of the decrease in farm-equivalent value per pound of broilers and some increase in the marketing spread, the farmer's share of the consumer's dollar spent for frying chickens continued to decline during 1970, averaging only 42 percent, compared with 48 percent in 1969.

Turkeys: Mediumweight turkeys (8-16 pounds) cost more in retail stores during October, November, and December of 1970 than for the same period in 1969. The estimated average price in the fourth quarter of 1970 (the period when most turkeys are marketed) was 54.8 cents per pound, an increase of 2.3 cents per pound over the equivalent price in 1969.

Turkey producers felt the cost-price squeeze in 1970 as live turkey prices moved lower and costs of production continued to rise. Mediumweight turkeys averaged 30 cents per pound during the last quarter of 1970, compared with 31½ cents per pound in the same period during 1969.

In the last quarter of 1970, marketing margins for turkeys averaged 24.8 cents per pound--18 percent higher than the 1969 average of 21 cents per pound during the same period. The farm-to-retailer margin averaged 12.6 cents per pound during the last quarter of 1970--0.1 cent less than a year earlier--but the retail margin rose from 8.3 cents per pound in 1969 to 12.2 cents in 1970.

The farmer's share of the consumer's dollar spent for turkey decreased to 55 percent in the last quarter of 1970, compared with 60 percent in the same period in 1969.

Bread

Bread prices and marketing spreads continued a long-term upward trend but at an accelerated rate in 1970. In retail food stores, white bread averaged 24.2 cents per 1-pound loaf, 1.2 cents above 1969 (fig. 4). This was the sharpest increase since 1951, when the price rose 1.4 cents. Higher price spreads for baking, wholesaling, and retailing accounted for all but 0.2 cent of the 1970 increase in the retail price. Farm value was up 0.1 cent, the miller's spread was unchanged, and the remaining 0.1 cent was accounted for by "other" spreads.

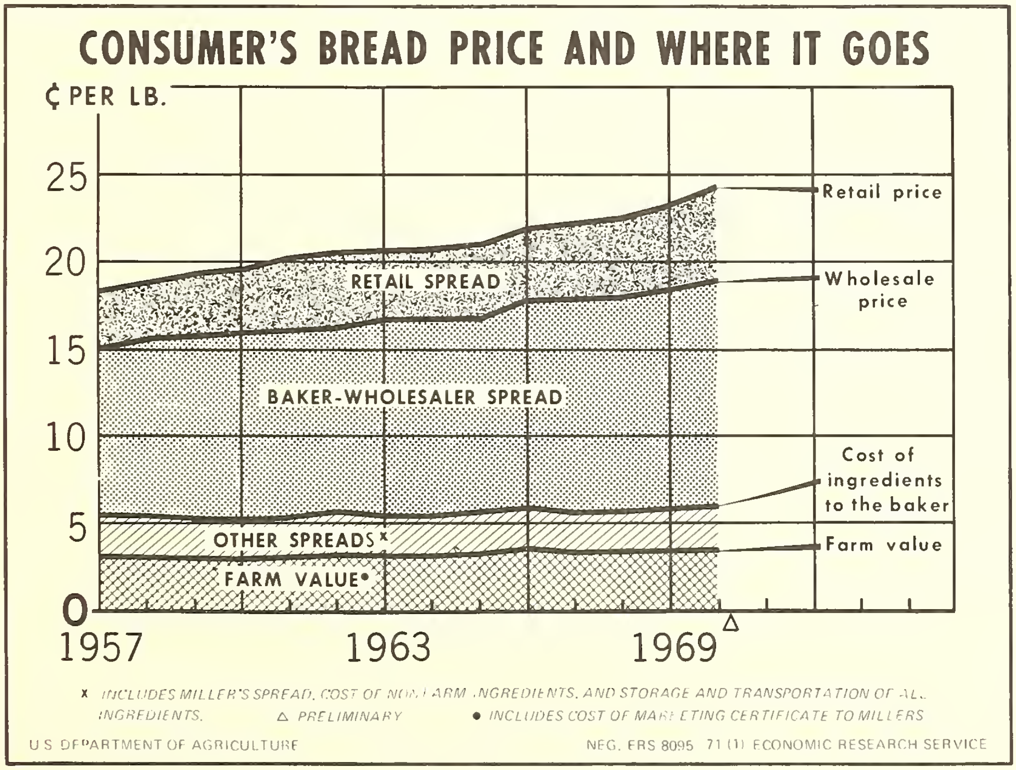

Figure 4

The rate of increase in the retail price of bread in 1970 was 5.2 percent--about the same as the rise in the general price level--but much above the 3.3-percent average annual rate of increase in bread prices during the 1950's and the 1.8-percent increase during the 1960's.

The total farm-retail price spread for bread increased at an annual rate of 6.1 percent in 1970. The comparable rate of increase during the 1960's was 2.3 percent. Last year, the baking-wholesaling spread rose 4.9 percent, and the retailing spread rose 8 percent. Both increases far exceeded the annual increases of the past decade.

The rate of increase in marketing spreads slowed during the 1960's, compared with the rate of change in the previous decade. This deceleration was attributed to increased efficiency resulting from the adoption of automation and improved methods of production. However, the trend toward greater efficiency apparently was offset by higher costs of inputs in 1970. The effects of inflationary pressures throughout the economy, especially rising labor costs, contributed to the rapid increase in the price of bread in the past year. Average hourly earnings of production workers in food and related manufacturing increased 7.6 percent between November 1969 and November 1970.

Although the retailer's spread increased in 1970 at a much faster rate than the baker's spread (charges for baking, selling, and distributing bread), the absolute increase in the baker's spread was more than for any other segment--accounting for 0.6 cent of the 1.2-cent increase in the retail price. In addition to the rise in wage rates, prices paid for materials and ingredients also increased. Overhead, such as depreciation, office, and administrative expenses, rose as well. However, profits per dollar of sales for baking and wholesaling bread through the first half of 1970 changed very little from the comparable period in 1969.

The retailer's spread increased 0.4 cent per 1-pound loaf of bread in 1970. This increase continued the upward trend in the retailer's spread as a percentage of the retail price and paralleled the general upward trend in retailing spreads for all grocery items. Increased costs associated with more elaborate store facilities and higher wages have been major contributors to this trend. Hourly earnings of employees in wholesale and retail trade increased almost 7 percent between November 1969 and November 1970.

A system of collecting monthly sales and prices to improve the price series of bread-type flour has been tested for a year in cooperation with the Millers' National Federation. Thus far the flour miller's marketing spread appears to be lower than previously estimated from secondary data. Further evaluation is needed, however, before survey data estimating the miller's marketing spread are incorporated into the price series.

Fresh Vegetables

Marketing spreads of most fresh vegetables widened in 1970, continuing a long-term upward trend. The spread of a market basket of fresh vegetables rose 9 percent last year, slightly more than the average of all farm products. Over the past decade, the marketing spread of fresh vegetables rose 50 percent, nearly double the increase in the spread of all farm foods.

Green Peppers: The retail price of green peppers in New York City averaged 58.9 cents per pound in 1970, almost 50 percent higher than in 1969 (fig. 5). Freezing weather and heavy rains in Florida reduced the pepper crop by 45 percent. Consequently, the Florida shipping point price (returns to growers and packers) increased 14.5 cents per pound. The total marketing spread increased 4.8 cents per pound.

Tomatoes: The retail price of winter and spring vine-ripened red tomatoes in New York City averaged 54.5 cents per pound in 1970, an increase of 4.9 cents. All the price increase went into the marketing spread, which increased 9.1 cents. Despite a 7-percent decrease in the Florida winter and early spring tomato crop, returns to Florida growers and packers dropped 4.2 cents per pound--the second consecutive year of declining supplies and diminishing returns. Increasing imports of tomatoes from Mexico--up more than a quarter in the year ending June 30, 1970--helped depress Florida tomato prices.

Asparagus: Asparagus was the only fresh vegetable priced substantially lower in 1970 than a year earlier. The retail price in New York City averaged 43.5 cents per pound for the 1970 season, down 6.8 cents from 1969 but still above the 1968 level. Returns to growers and packers dropped 7.2 cents in 1970, but the marketing spread increased by 0.4 cent.

Fresh Fruits

Retail prices of most fresh fruits were higher in 1970, but lower apple prices held the total cost of fresh fruit in the market basket at the 1969 level. Returns to growers and packers were generally lower, but the total marketing spread widened.

Apples: Of the major fruits, only apples had a marked drop in prices from the preceding year. The 1969 apple crop (marketed largely in 1970) was approximately a fourth larger than a year earlier, and prices were lower at all market levels. The retail price of Washington Red Delicious apples in New York City averaged 29.7 cents per pound for the 1969/70 season, down 4.3 cents (fig. 6). Returns to Washington growers and packers dropped even more--6.8 cents per pound. The total marketing spread increased 2.5 cents, all going into the wholesale-retail spread (charges for retailing and secondary wholesaling).

Oranges: The 1969/70 orange crop was moderately larger than the previous crop, but most of the additional oranges were processed. Retail prices of fresh oranges in New York City were virtually unchanged.

The retail price of California navel oranges in New York City averaged 23.6 cents per pound for the 1969/70 season, up only 0.4 cent. Although the 1969/70 California navel orange crop was 14 percent larger than the preceding year, only 1 percent more oranges were sold fresh. Consequently, returns to California growers and packers were down only 0.2 cent per pound. The total marketing spread increased 0.6 cent.

The New York City retail price of Florida oranges averaged 14.2 cents per pound for the 1969/70 season, the same as the preceding season. Florida's

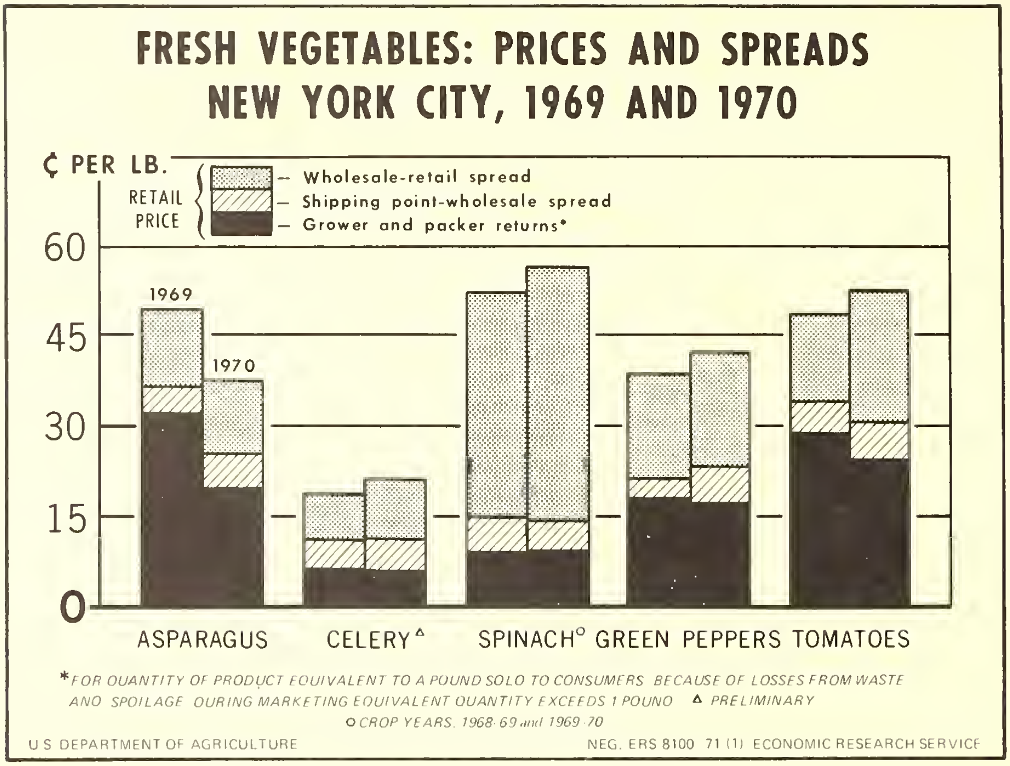

Figure 5

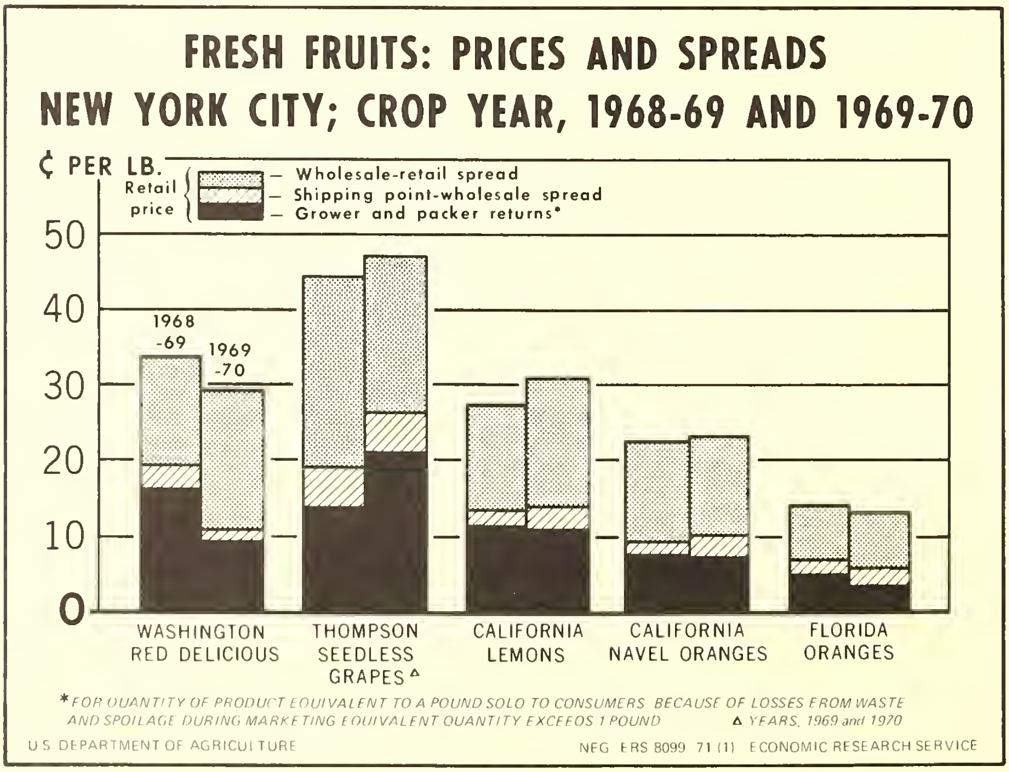

Figure 6

1969/70 orange crop was up 6 percent over a year earlier, but only 0.8 percent more oranges were sold fresh. Returns to Florida growers and packers dropped 0.7 cent per pound in 1969/70, and the marketing spread increased by an equal amount.

Grapes: The retail price of Thompson Seedless grapes in New York City averaged 47 cents per pound in 1970, a 2-cent increase over 1969. This was the fifth consecutive year grape prices have increased. A 24-percent drop in the 1970 California grape crop resulted in a 7-cent increase in returns to California growers and packers of Thompson Seedless grapes. The total marketing spread narrowed in 1970.

Lemons: The retail price of California lemons in New York City has increased for the past six seasons. The 1969/70 price averaged 32 cents per pound, an increase of 4 cents over 1968/69. All of the price increase last year reflected higher marketing charges, as returns to growers and packers dropped 0.3-cent per pound.

Fats and Oils

Retail cost of fats and oils--margarine, peanut butter, salad and cooking oil, and vegetable shortening--rose 7 percent in 1970, mainly as a result of a 20-percent increase in farm value. The marketing spread rose 2 percent. Marketing spreads for fats and oils have gone up the past several years, but the rate of increase has been slower than for most food products.

Most of the increase in the farm value of fats and oils last year reflected a sharp increase in the price received by farmers for soybeans. Soybean oil accounts for roughly three-fourths of all oils used in shortening, salad and cooking oil, and margarine.

Returns to farmers for the oils used in shortening, salad and cooking oils, and margarine accounted for between 25 and 35 percent of the retail price of these products--slightly more than in other recent years. Almost half of the retail price of shortening, salad and cooking oil, and margarine is associated with manufacturing charges; about one-sixth represents wholesaling and retailing charges.

FOOD MARKETING COSTS

The total bill for marketing foods originating on U.S. farms was estimated at $69 billion last year, up 8 percent from 1969. This increase was larger than any year during the 1960's and reflected a sharp rise in labor costs. The marketing bill--the difference between consumer expenditures and farm value--is an estimate of the total cost of transporting, processing, and distributing farm foods bought by consumers (fig. 7). Last year, marketing charges accounted for about two-thirds of the $102 billion spent by consumers for farm foods. Farmers received $33 billion for food products last year, about 4 percent more than in 1969.

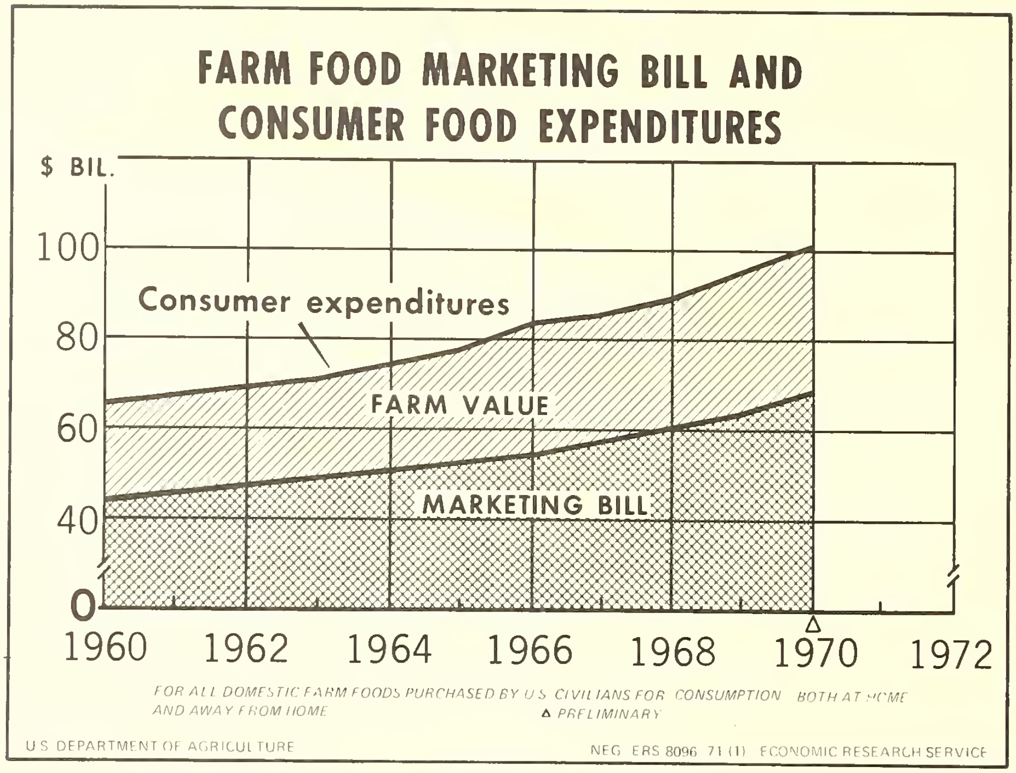

Figure 7

Among food groups, fruits and vegetables and meats have the highest marketing bill (fig. 8). The cost of marketing these products amounts to over $30 billion, half the total cost of marketing farm foods. High marketing charges for fruits and vegetables may be attributed in part to the highly perishable and bulky nature of the fresh produce and to the concentration of production in areas distant from many large markets.

In the past decade, the total food marketing bill rose $24 billion or an average of 4½ percent per year. About half of this increase resulted from growth in the volume of products moving through the marketing system. Rising costs per unit of product marketed, the main cause of rising food prices, accounted for a third of the increase. The remainder reflects more services per unit of product, due principally to an increase in output of processed foods and to more away-from-home eating.

A large and expanding part of the marketing bill is associated with marketing food through away-from-home eating establishments. Estimates show that away-from-home eating accounts for more than one-fourth of total consumer expenditures for farm foods. Public eating places, mainly restaurants, have two-thirds of the away-from-home market, while hospitals, schools, and other institutions supply the remainder. Away-from-home eating establishments have a gross margin 2½ times that of food stores. Therefore, the increase in away-from-home eating has had a dramatic impact on the total food marketing bill.

A study was initiated in fiscal 1970 to develop a separate marketing bill for away-from-home eating. This research will provide data for analysis and evaluation of the costs and farm values associated with marketing foods through public eating places in comparison with food stores.

Labor Costs

Labor costs account for nearly half of total food marketing charges. Last year, labor costs were estimated at $32 billion, up 9 percent from 1969 and 21 percent above 1968.

The increase in labor costs the past few years resulted largely from higher wages and salaries. Earnings of food marketing employees have been rising at an increasing rate for several years. Employees of food marketing firms earned an average of $3.11 per hour in November 1970, 7.2 percent more than a year earlier. For the comparable period in 1968-69, earnings rose 6.2 percent. Increases in earnings of workers in food marketing have been part of the general rise in earnings throughout the economy.

Improvement in productivity offset a very small part of the rise in hourly earnings in food marketing in the past 2 years. Productivity increases slackened sharply throughout the economy in 1969 and 1970. Data published by the Department of Labor showed an increase of less than 1 percent in output per man-hour in the nonfarm economy both years, compared with an average gain of around 3 percent between 1960-68. This decline in output per man-hour,

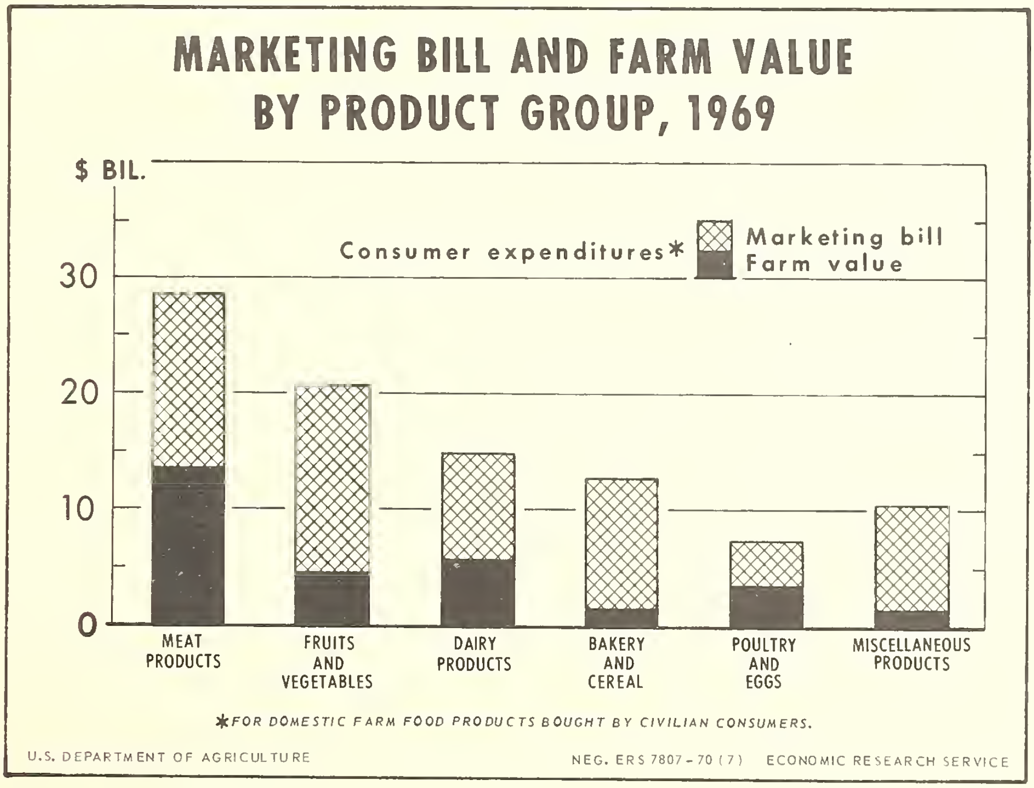

Figure 8

combined with rising wage rates, resulted in a substantial increase in labor costs per unit of output and boosted the general price level. Latest ERS estimates show that output per man-hour in food manufacturing declined almost 1 percent in 1969, causing a sharp increase in labor costs per unit of output.

In contrast to the past couple of years, gains in productivity over the past decade have offset about half the effects of increases in hourly labor costs on costs per unit of output. Between 1957-59 and 1970, wages, salaries, and fringe benefits in food marketing increased 81 percent, whereas labor cost per unit of food marketed rose 43 percent.

Since wage contracts of employees usually extend over several years and contain provisions for successive annual increases, hourly earnings are expected to rise further in 1971. The effect of these increases on marketing charges for farm foods will be influenced to a great extent by productivity trends.

Transportation Charges

Two general rail freight rate increases were authorized by the Interstate Commerce Commission (ICC) in June and November 1970, and a further proposed increase of 7 percent remains under suspension. These two increases were preceded by three more or less general increases in August 1967, November 1968, and November 1969. Altogether the five increases resulted in an overall increase of approximately 30 percent. If the proposed increase now under suspension becomes effective, rates could exceed those in effect in July 1967 by as much as 40 percent. However, some grains and other products were exempted by railroads and/or ICC action from application of the full increases accorded to other products.

Rail freight rate indexes and food transportation cost series developed and maintained by ERS are available only through 1969. The 1969 rate index of all agricultural products combined was 4 percent above that in 1966, indicating that agricultural products enjoyed some exemptions and holddowns from the general increases. Average rates in 1969 would have been about 9 percent above those in 1966 if they were affected only by the general increases authorized before the end of 1969. The combined rate indexes of 1970 and 1971, and perhaps later years, will probably exceed the 1969 index as the 6-percent increase authorized in November 1969 and the 5- and 9-percent increases of June and November 1970 make their full impact.

Regulated truckers also have increased rate levels several times since 1965. However, because of the large numbers of ratemaking units operating in the trucking sector and the lack of coordination of rate proposals among units, it is not feasible to generalize about increases in truck rates. Moreover, truck rates for unmanufactured agricultural products and water rates for bulk commodities are not regulated, so information about changes in these sectors is not available.

Based on quantities of food marketed to domestic consumers and rail rate indexes, the estimated cost of shipping farm food products by truck and rail was $4.8 billion in 1969, up $0.1 billion from 1968. Transportation costs

accounted for a smaller share of the food marketing bill in 1969 than in 1959. One cause was the very intensive competition among railroads, trucks, and barges that began in the late 1950's and the subsequent decline in transportation rates. Rail freight rates on food products in 1965-67 were only 88 percent of those in 1957-59. Even in 1969, they were only 93 percent of the 1957-59 level. However, increases authorized in the past 2 years seem likely to boost rail rates in 1971 above those of 1957-59.

Changes in rail rates in recent years have varied considerably among agricultural products. Between 1966 and 1969, increases by commodity groups were as follows: Livestock, 9.3 percent; tobacco, 8.3 percent; fruits and vegetables, 8.2 percent; meats, 7.0 percent; wool, 5.8 percent; soybeans, 4.8 percent; cotton, 4.3 percent; wheat, 3.6 percent; and all grains, including corn, no change.

Competition for traffic explains to some degree the differences in rate trends. Competition for grain traffic especially was keen, and rail shipments of grain declined significantly in 1967 and 1968.

The volume of rail traffic in livestock is very low, with most livestock moving by exempt trucks. The continuing trend toward relocation of slaughtering plants nearer to producing areas is not expected to generate an increase in rail livestock traffic; hence, railroads have little incentive to hold down rates.

Trends in rail rates for meats prior to 1966 indicate that railroads were competing vigorously for meat traffic. Meat rates since 1966 have risen substantially, but the increase has not necessarily resulted in loss of rail traffic since truckers have also applied for general rate increases frequently between 1965 and 1970. Thus, railroads may have found it unnecessary to hold down meat rates to retain desired traffic.

Fresh fruits and vegetables lend themselves to piggyback rail movements, so the single carload rates used to measure rail rate trends may not fully reflect trends in the rates actually used for shipments of these products. Much of the traffic in fresh produce is not carried by exempt trucks, except for large volume movements over long distances.

Rail rates on cotton have been more stable than for any other agricultural product included in the ERS indexes. Rail traffic in cotton also has been stable--4.1 million tons in 1958, 3.7 million tons in 1962, 4.0 million tons in 1966, and 4.1 million tons in 1968--indicating little diversion of cotton traffic among the modes.

Transportation companies are subject to cost changes. Labor and capital are combined in different proportions by the different transportation modes. The proportioning of inputs is influenced by technological changes and changes in price ratios. Trucks use relatively more labor; railroads and barges, more capital. With both labor and capital costs increasing substantially during the last 4 years, no mode of transportation appears to have gained comparative advantage from recent input costs trends. However, interest rates have recently declined somewhat. If these lower rates continue, railroads and barges may experience less cost increase in 1971 than trucking.

Capital Costs

Capital costs, including depreciation, rent, and interest are a relatively small proportion of total marketing charges--roughly 6 percent in recent years. Interest expense of food firms, estimated from income tax statistics published by the Internal Revenue Service, amounts to around $0.6 billion, while rent expense totals $1.9 billion, and depreciation, $2.4 billion. These costs have doubled during the past decade as marketing firms have expanded to handle a growing volume of farm products. Rising interest rates and prices of new construction and equipment also have boosted interest expense and other capital costs, particularly in recent years.

The cost of long-term credit, as measured by yields on high-grade bonds, averaged over 8 percent in 1970--up from 7 percent in 1969 and 5.5 percent in 1967. While money costs were rising, costs of new plants and equipment continued to increase, averaging 5 percent higher last year than in 1969. Rental rates, property insurance, and maintenance costs also have been rising. An index of service, which includes these items, has risen nearly 20 percent in the past 3 years, much more than prices of most items.

Advertising

Food marketing firms spent about $2.2 billion on advertising farm food products last year, or the equivalent of 2 cents of the consumer's food dollar. Advertising costs exceeded corporate profits after taxes, rent, and interest. Food processors are the largest spenders for advertising, accounting for around two-thirds of total expenditures. During the past 10 years, outlay for advertising has increased at a fairly constant rate of around 5 percent per year.

Business Taxes and Other Costs

Business taxes, such as social security and unemployment insurance, State income taxes, and license fees, amounted to an estimated $2.5 billion last year, a fourth more than in 1967. This increase reflects higher social security rates as well as rising State and local taxes paid by business firms.

Other costs of marketing farm products include containers and packaging materials, fuel and electric power, repairs, local for-hire transportation, and numerous other items. Prices of containers and packaging materials rose about 5 percent in 1970, a 12-percent increase since 1967. Fuel and power costs and electric rates jumped 11 percent last year, more than double the total increase in these prices the past decade.

Rising price levels continue to exert pressure on costs of marketing farm foods (fig. 9). The upward climb in wages and other costs has been especially pronounced during the recent inflationary period. Even if inflationary pressures diminish, however, marketing costs seem likely to continue rising, in part because of rigidities built into the marketing system. The continued growth of fringe benefits adds to the inflexibility of labor costs. Taxes, capital costs, transportation, and utility charges are adding to the upward pressure on costs over which marketing firms have little direct control. The continued rise in costs requires a high level of performance by the food industry to mitigate the increase.

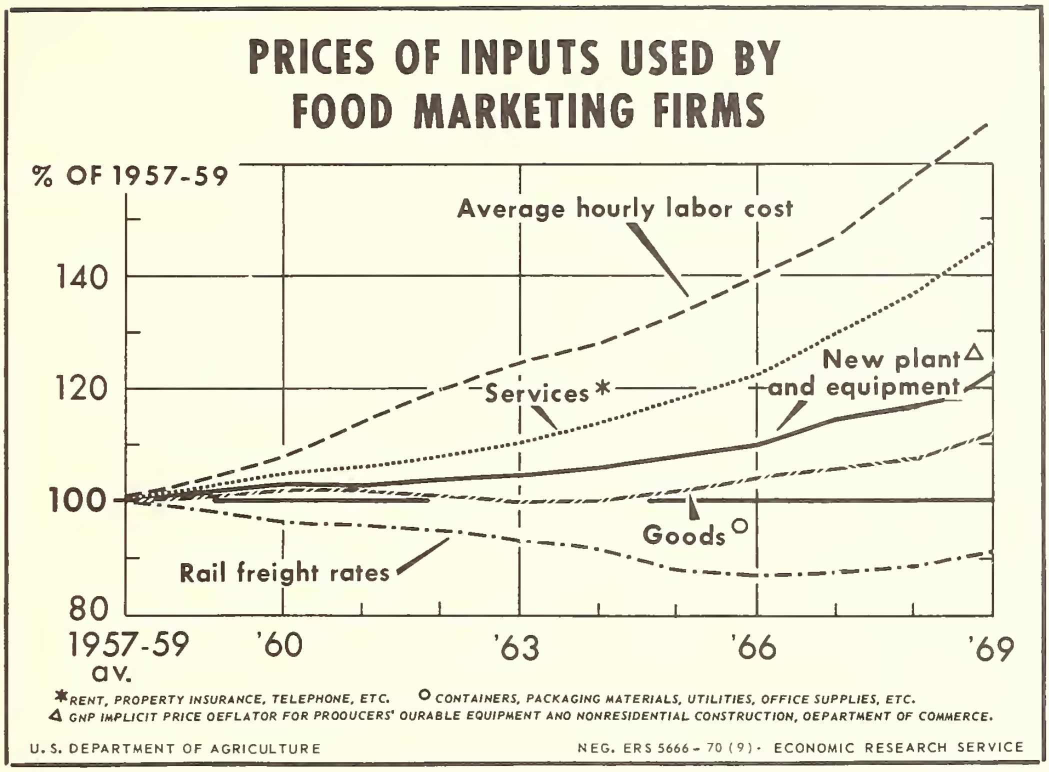

Figure 9

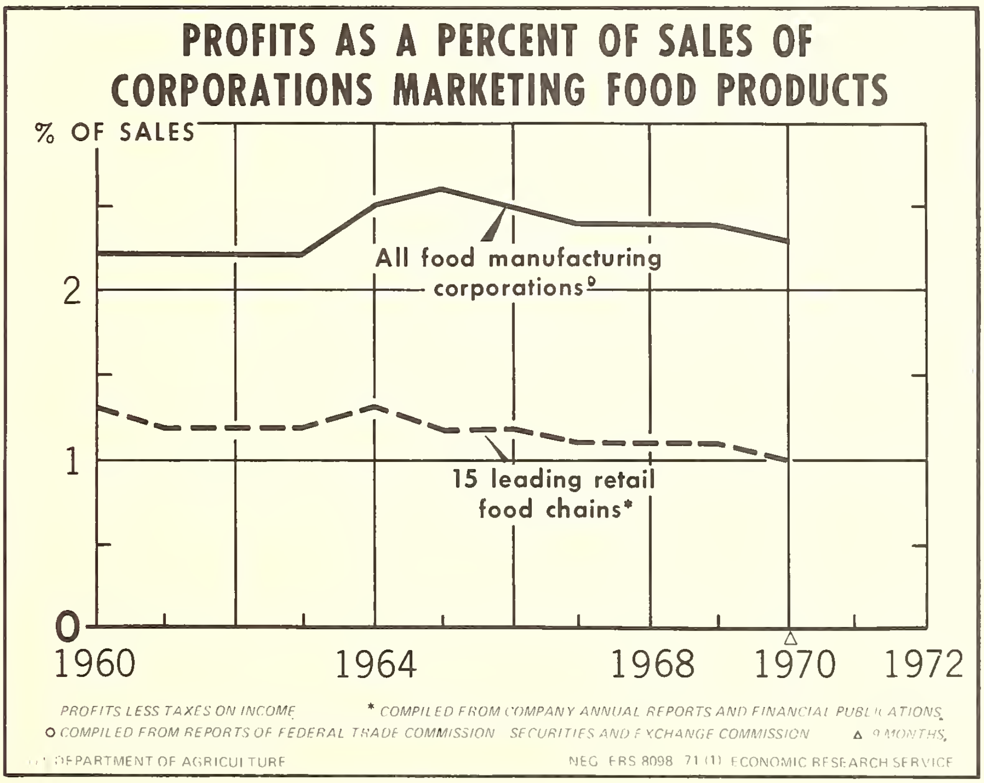

Figure 10

Corporate Profits

Before-tax profits of corporations from marketing farm food products totaled an estimated \$4.1 billion last year, compared with \$3.9 billion in 1969 and \$3.4 billion in 1967. Most of the increase in total profits in the past several years reflected larger dollar sales.

As an element in the cost of marketing food, profits have stayed about the same in relative importance in recent years, ranging between 5 and 6 percent of the marketing bill. Although corporate profits are a relatively small part of food costs, they represent about 12 percent of the farm value of food products.

In the first 9 months of 1970, profits after taxes of food manufacturers averaged 2.3 percent of sales, slightly lower than in 1969 (fig. 10). Profit rates of food manufacturers in recent years have been below the level of the mid-1960's when they rose to the highest level of the decade.

Profit rates of food retailers have been relatively stable for several years and considerably below earlier levels. Since 1967, profits after taxes of 15 leading retail food chains have averaged 1.1 percent of sales, compared with 1.3 percent in 1964. Return on net worth has averaged slightly over 10 percent in recent years, compared with over 11 percent in the mid-1960's.

Profit margins of food marketing firms are slightly below the average of all industries when expressed as a percentage of net worth; but in terms of percentage of sales, they are among the lowest, due largely to their rapid turnover of stocks in relation to net worth.

SHARE OF INCOME SPENT FOR FOOD

Food costs are frequently viewed in relation to factors other than price to get a broader perspective of the impact of food expenditures on the cost of living. Two of these factors are the share of total income spent for food and the amount of work required to buy selected foods.

In 1970, consumer spending for food amounted to an estimated \$114 billion, 8½ percent more than in 1969. Since 1965, the average annual increase in food expenditures has been slightly more than 5 percent.

Although food spending went up in 1970, it was matched by an increase of 8½ percent in personal disposable income. Consequently, the share of income spent for food--16.7 percent--was unchanged from 1969 (fig. 11). Over the years, the proportion of income spent for food has declined, leaving consumers with more money to buy other things.

As income has gone up, the amount of work time required to purchase food has declined. For example, 1 hour of factory labor would buy 8.2 pounds of frying chicken in 1970, but only 4.7 pounds in 1957-59. Similarly, 1 hour's wages would buy 3.4 pounds of Choice beef last year, compared with 2.7 pounds in 1957-59 (fig. 12).

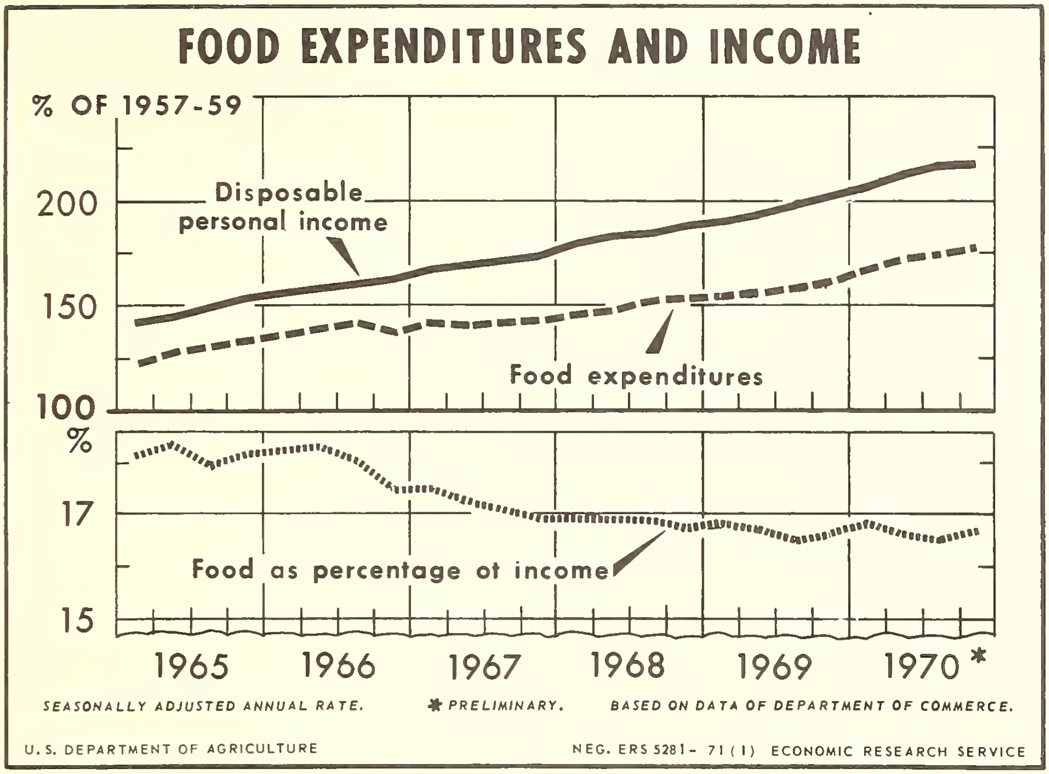

Figure 11

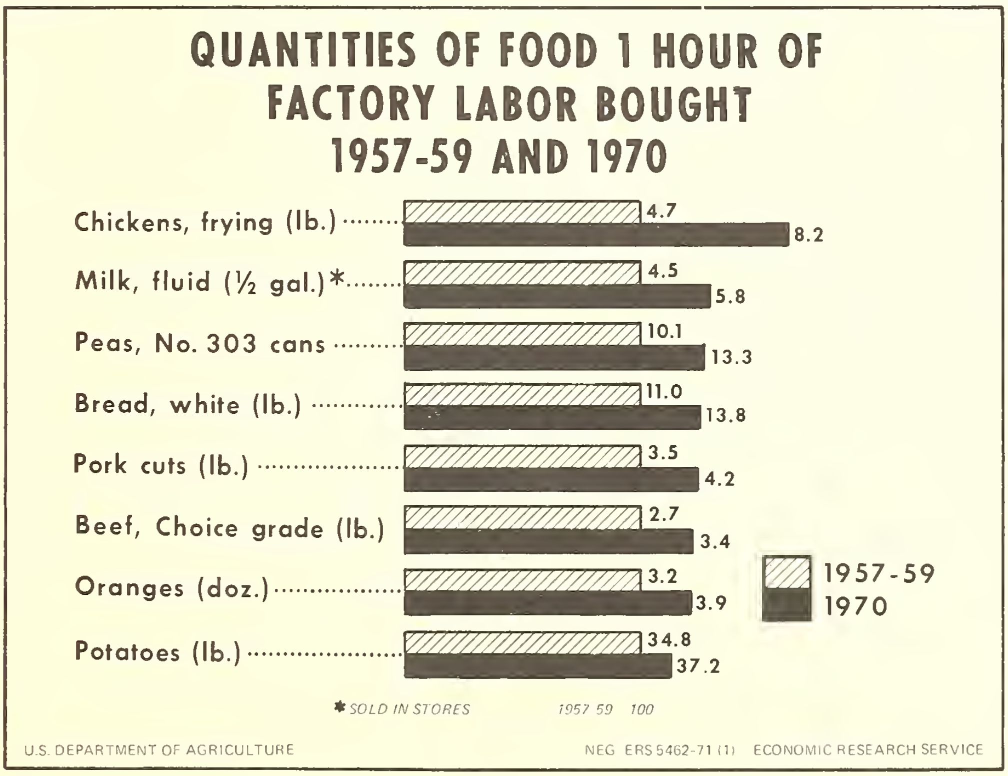

Figure 12

USDA MARGINS AND COSTS PUBLICATIONS

Prices and Spreads for Apples, Grapefruit, Grapes, Lemons, and Oranges Sold Fresh in Selected Markets, 1962/63-1966/67. MRR-888, June 1970.

Prices and Spreads for Potatoes, Sweetpotatoes, and Other Selected Vegetables Sold in Fresh Markets, 1962/63-1966/67. MRR-901, September 1970.

Costs of Storing and Handling Farmers' Stock Peanuts in Commercial Facilities, Estimated 1969. ERS-352, Revised February 1970.

Soybean and Cottonseed Oils Used in Shortening and Salad and Cooking Oil--Trends, Prices, Spreads. MRR-898, August 1970.

Developments in Marketing Spreads for Agricultural Products in 1969. ERS-14 (1970), May 1970.

What Makes Food Prices? ERS-308, Revised October 1970.

Cotton Gin Operating Costs in West Texas--1968/69. MRR-903, September 1970.

Price Spreads for Beef and Pork: Revised Series 1949/69. Misc. Pub. 1174, May 1970.

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Charges for Ginning Cotton, Costs of Selected Services Incident to Marketing, and Related Information, Season 1969/70. ERS-2 (1970), June 1970.

Major Statistical Series of the U.S. Department of Agriculture. How They Are Constructed and Used. Volume 4, Agricultural Marketing Costs and Charges. Agr. Handbook 365, June 1970.

Costs of Storing and Handling Cotton at Public Storage Facilities, 1968/69, with Projections for 1969/70 and 1970/71. ERS-443, April 1970.

Effects of Chemical Additives X-78 on Ginning and Processing Performance and Cotton Quality. MRR-870, August 1970.

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Labor Productivity in Food Manufacturing. Marketing and Transportation Situation, MTS-176, February 1970.

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Marketing Margins for Selected Dairy Products and Their Substitutes. Marketing and Transportation Situation, May 1970. Reprinted as ERS-449.

The Bill for Marketing Farm-Food Products. Marketing and Transportation Situation, August 1970. Reprinted as ERS-20 (1970).

Comparison of Cost Structures of Food Stores and Eating and Drinking Places. Marketing and Transportation Situation, August 1970. Reprinted as ERS-455.

The Farm Index. Monthly. In each issue, sections on marketing and the consumer summarize in short articles and notes materials from research on price spreads and related subjects.

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